



FLORIDASM

The Perfect Climate For Business.



Governor Rick Scott
Board Chairman
Enterprise Florida

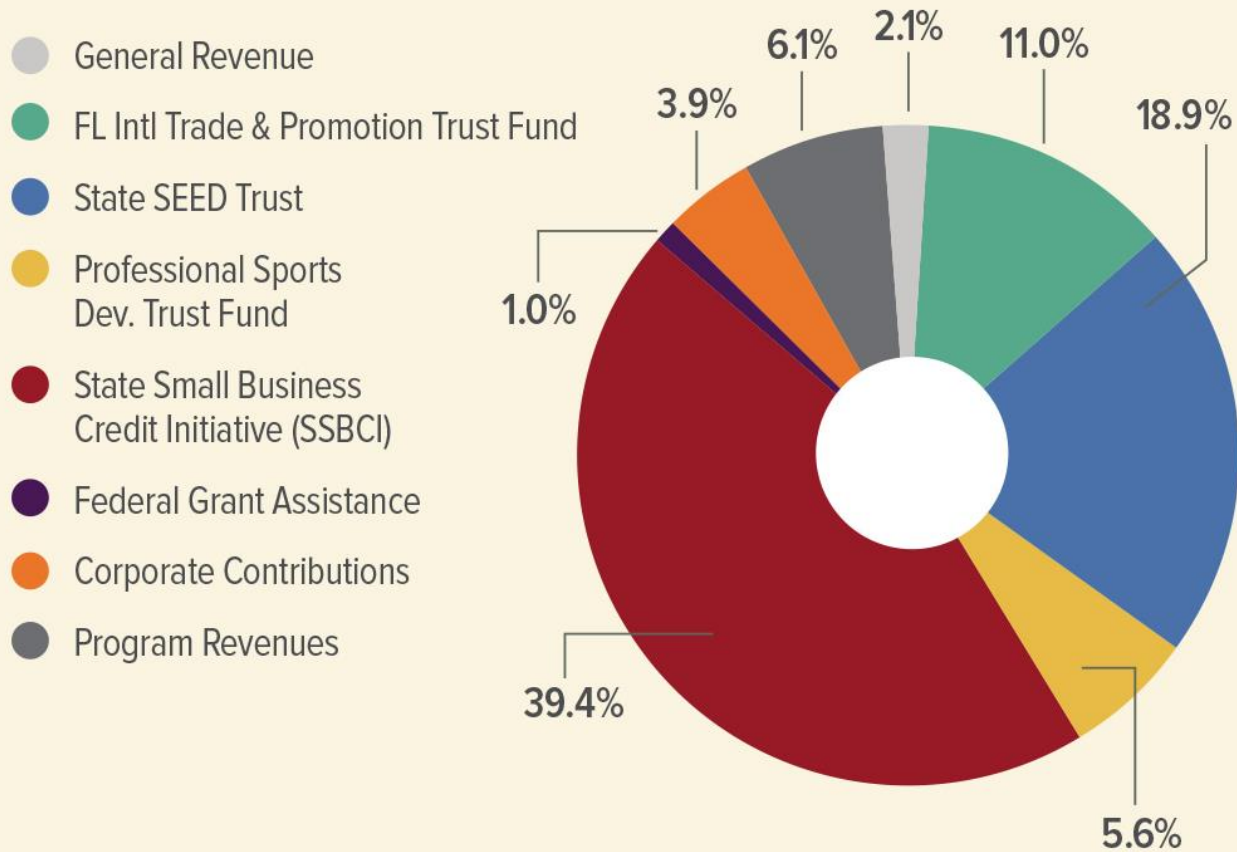


Gray Swoope
Secretary of Commerce
President & CEO
Enterprise Florida

The State of Florida's economic development leadership is committed to partnering with manufacturing industry to create a low cost and stable environment for job creation and investment



Source of Funds 2013-14

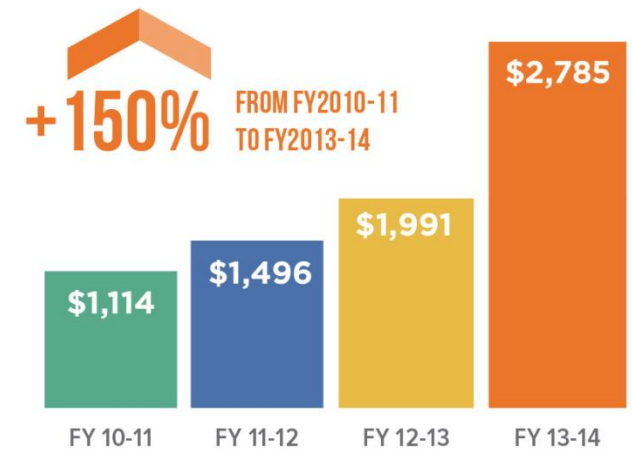


Business Development Performance

Competitive Projects Average Wage (4 Year Comparison)



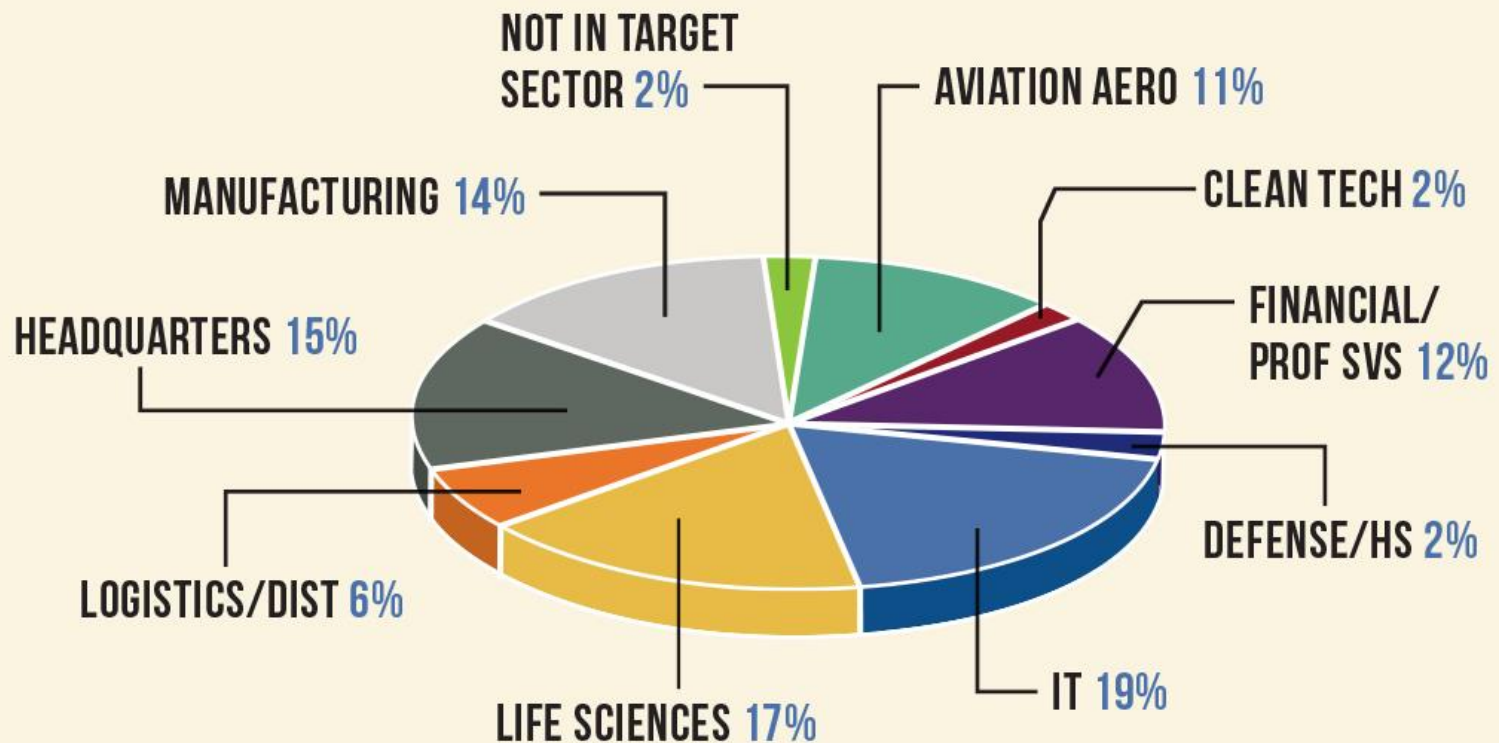
Capital Investment (\$millions)



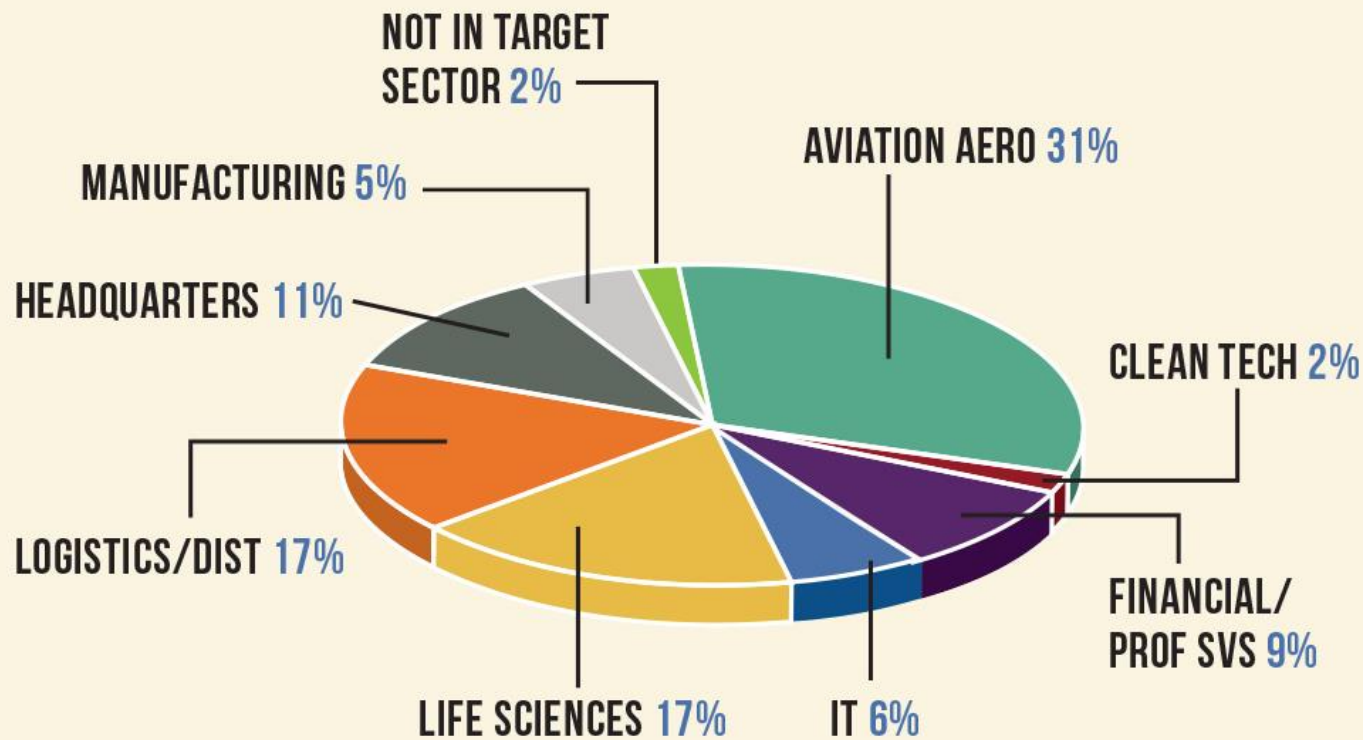
FY 2010-14 New Jobs + Retained Jobs = Total Jobs

| FISCAL YEAR | NEW JOBS | RETAINED JOBS | TOTAL JOBS |
|-------------|----------|---------------|------------|
| FY 10-11 | 14,437 | 5,272 | 19,709 |
| FY 11-12 | 14,684 | 10,868 | 25,552 |
| FY 12-13 | 20,188 | 5,005 | 25,193 |
| FY 13-14 | 23,864 | 12,343 | 36,207 |

Established Projects by Industry (FY 2013-14)



Percentage of Capital Investment by Industry (FY 2013-14)



Florida is a Manufacturing State!

Manufacturing Facts

17,859

manufacturing
firms

311,263

manufacturing
workers

5%

of State
GDP

\$52,372

Average
wage

Manufacturing Advantages

Top 5

State for Talent Pipeline

3rd

Lowest Private Sector
Unionization Rate in
the U.S.

Top 5

State for Bachelor's
Degree Holders,
Technical Workforce,
and Science and
Engineering Workforce

Education Supports Manufacturing

Educational Programs

- 15** Degree programs supporting advanced manufacturing
- 20** Community and State colleges offering advanced manufacturing programs
- 10** Additional college credit certificates (CCC) offered through other manufacturing related degree programs



Training Resources

- Florida Advanced Technological Education (FLATE)
- Florida Manufacturing Extension Partnership (Florida MEP)
- Employ Florida Banner Center for Advanced Manufacturing (BCAM)



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Automotive Industry In Florida

Auto Stats

361 Number of firms manufacturing motor vehicles and parts

5,838 Employees in sector

\$43,732 Average wage (24th in the U.S.)

520,000+ Vehicles handled at JAXPORT

Auto Rankings

#4 State for Motor Vehicle Body & Trailer Manufacturing

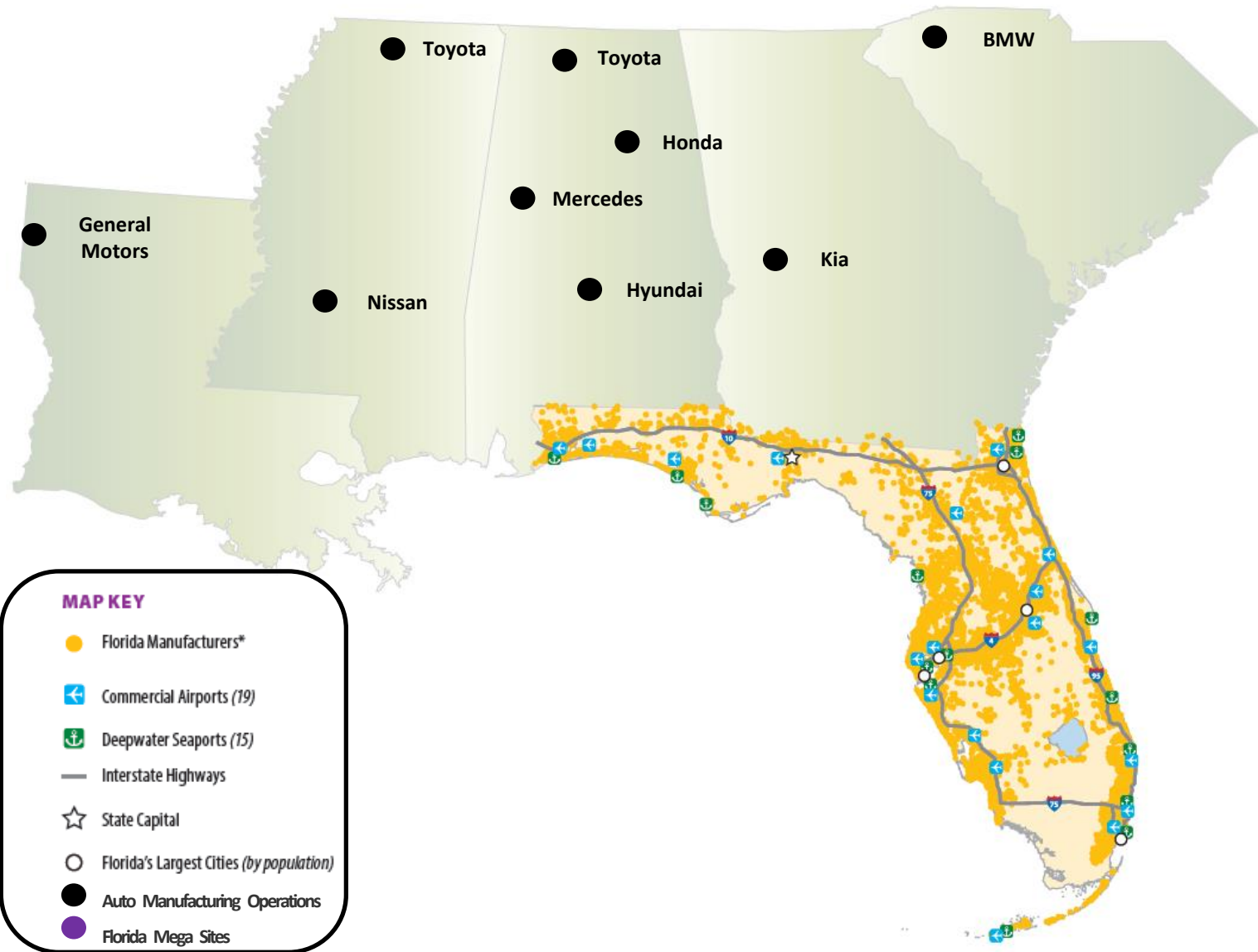
#5 State for Motor Vehicle Manufacturing

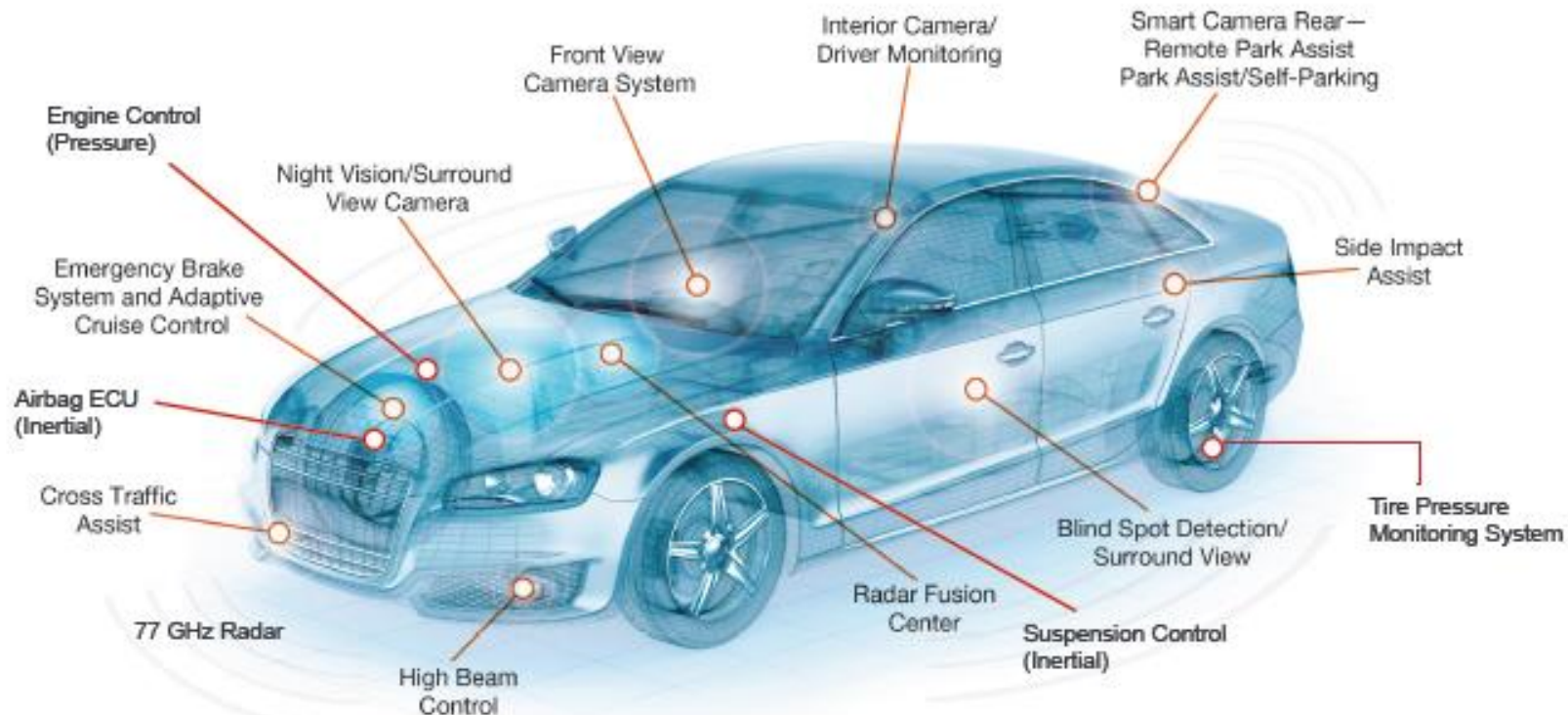
#6 State for Vehicle Exports

#9 State for Motor Vehicle Parts Manufacturing



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Sensors found in modern cars



We ran out of room! Not shown are:

- electric parking brake (inertial)
- Vehicle Stability (Inertial)
- Inertial and Pressure Side Crash Satellite
- A host of traditional automotive sensors

Advanced Driver Assistance System Market Trends



COMFORT WHILE DRIVING

Keeping the Car on the Road

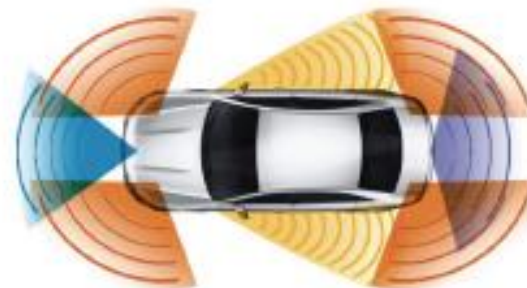
- Camera and radar
- Cognition algorithms to extract features/classify objects
- No display necessary
- Functional safety applied to longitudinal motion



SAFE DRIVING

360° Surround

- Rear/Side camera, sat. Radar, Ultrasonic, Lidar
- 3D image techniques and data fusion
- 2.5D and 3D with high quality
- Greater safety as lateral movements are controlled



SELF DRIVING

Managing Co-driving

- Large data-object handling
- 3D environmental modeling allowing self-navigation
- Ego motion
- Greatest safety—longitudinal and lateral motion prediction
- Integration of feature extraction

Transition from Passive to Active Safety

- **Cars that don't crash**
- **Everything now needs to be sensed**
 - Fitness to drive
 - Active steering
 - Driver/Passenger condition
- **Biggest challenge for self driving cars are non-self driving cars**



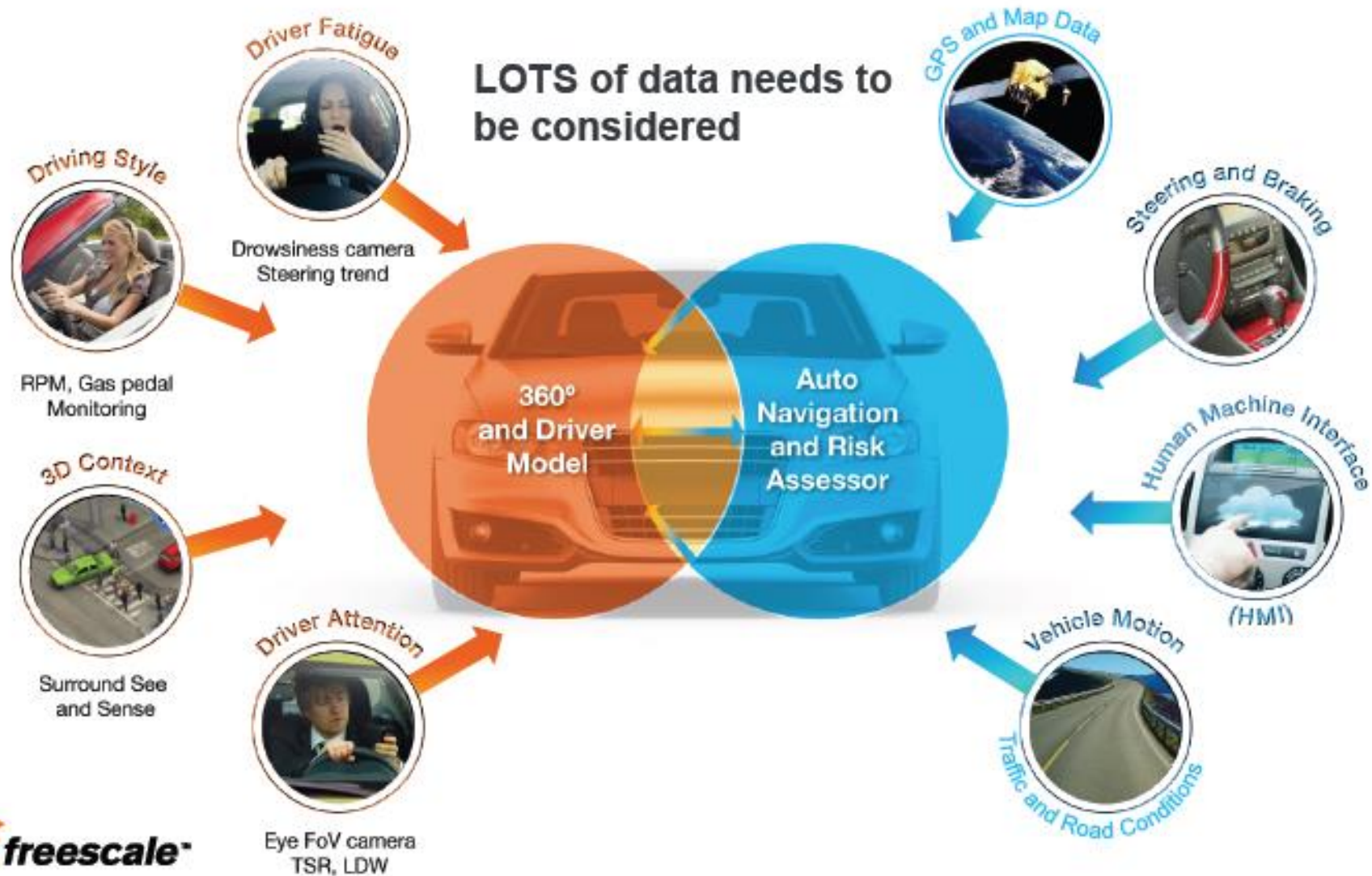
The world as seen via high definition LiDAR



Interaction with Sensors and the Infrastructures

- **V2V interaction**
 - Latest traffic updates
 - Upcoming hazard warnings
 - Matching travel speed
- **V2I interaction**
 - Surface conditions
 - Road/Lane closures and re-routes
 - Driver/Passenger interests and conveniences
- **V2P interaction**
 - Monitor driver/passenger alertness from his wearables
 - Seamlessly take over when driver is otherwise occupied





Autonomous Car Advantages

- Computers are not subject to fatigue
- ability to convoy or “draft” vehicles improves MPG
- Higher speeds are possible
- safer
- no drivers license required
- car sharing arrangements become more practical





International Consortium for Advanced Manufacturing Research



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iCAMR

International Consortium for Advanced Manufacturing Research

ADVANCED MANUFACTURING

The world's first industry-led consortium for manufacturing of smart sensors



ONE STOP SHOP



R & D SOLUTIONS



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THE MANUFACTURING CENTER

STATE-OF-THE-ART FACILITY
REDUCED COSTS
OVER 150,000 SQ. FT. LAB & OFFICE SPACE WHEN BUILD COMPLETE





SEPTEMBER 3, 2014, 1:13 PM

Osceola high-tech facility speeds toward hiring, construction plan

By Paul Brinkmann

The effort to build a high-tech manufacturing facility in Osceola County is moving ahead fast on hiring and planning for construction.

Qualifications going out to contractors

and technology for the Florida Advanced

which is to be built near Kissimmee

high-tech center will have unique

ed contractors. The facility will

nces, cars, mobile devices and

NASA projects or other high-tech

llion center, which will

UCF, Osceola County strike deal for \$61 million smart sensor center

Jun 17, 2014, 7:47am EDT | UPDATED: Jun 17, 2014, 8:03am EDT

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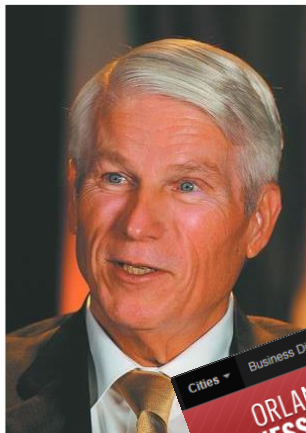


Matthew Richardson
Reporter-
Orlando Business Journal
Email | Twitter | Google+

The University of Central Florida and Osceola County are at the beginning stages of a deal to build a \$61 million "smart sensors" research center that could create thousands of high-tech jobs.

The news was announced Monday night, with Osceola County commissioners and UCF President John Hitt calling the partnership a "landmark effort to expand prosperity in Central Florida," reports the Orlando Sentinel.

Officials are comparing the partnership's impact to Lake Nona's Medical City, which Hitt described as the "the greatest economic



ORLANDO BUSINESS JOURNAL

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Osceola's Advanced Manufacturing Research Center seeks design/build team

Sep 3, 2014, 1:22pm EDT

UNIVERSITY OF CENTRAL FLORIDA

Community

UCFTODAY Arts Business Colleges Community Health Opinions Science & Technology

New Smart Sensors Research Partnership Aims to Boost Florida in Growing Industry

The University of Central Florida will partner with Osceola County and the Florida High Tech Corridor Council to establish a state-of-the-art research center focused on the next generation of universal

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County luring in UCF research center

Posted on Friday, August 15, 2014 at 12:50 pm

By Ken Jackson
Staff Writer

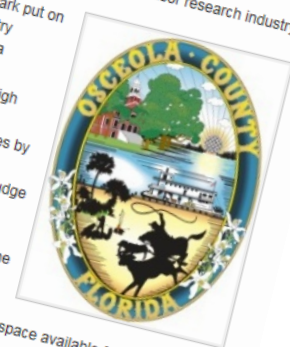
It will take a collaborative, community effort for Osceola County to become an epicenter for the sensor research industry before the end of the decade.

That was the message at a breakfast event Tuesday at Osceola Heritage Park put on by the Metro Orlando Economic Development Commission. It brought industry partners together who will work toward bringing a University of Central Florida research facility to the area.

County leaders approved a plan to partner with UCF and the Florida High Tech Corridor Council to build a research facility that will aid in the creation of smart sensors. Those sensors would eventually power 50 billion devices by 2020.

The manufacturing Research Center would be located on the Judge S. Highway 192 across from Osceola Heritage Park. The center would build 100,000 square feet of space for the facility's design and construction, including making the project work around a 200-acre pond that the county acquired by the county in 2012, still would have space available for other

Fred Hawkins sat on a panel at Tuesday's investor gathering and said the project gives





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